

**System and Method for Arrhythmia Discrimination**

**Abstract of the Disclosure**

The present invention provides a system and a method for  
5 discriminating supraventricular tachyarrhythmias from ventricular arrhythmias  
during a tachycardia episode. First cardiac signals and second cardiac signals are  
sampled for cardiac complexes. A first feature on the first cardiac signal and a  
second feature on the second cardiac signal are utilized to determine an average time  
difference for a plurality of normal sinus rhythm complexes. A time difference  
10 between the first feature and the second feature is then determined for each cardiac  
complex of a tachycardiac rhythm. The cardiac complex is characterized as a  
ventricular tachycardia complex if the time difference exceeds the average time  
difference by a predetermined amount. Otherwise, it is classified as VT if its  
morphology after alignment is different from that during normal sinus rhythm.

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